ASP.NET, C#

Active Server Pages (ASP), also known as Classic ASP, was introduced in 1998 as **Microsoft**'s first server side scripting engine. ASP is a technology that enables scripts in web pages to be executed by an Internet server. ASP pages have the file extension .asp, and are normally written in VBScript.

ASP.NET is a new ASP generation. It is not compatible with Classic ASP, but ASP.NET may include Classic ASP.ASP.NET pages are compiled, which makes them faster than Classic ASP.ASP.NET has better language support, a large set of user controls, XML-based components, and integrated user authentication.ASP.NET pages have the extension .aspx, and are normally written in VB (Visual Basic) or C# (C sharp).

User controls in ASP.NET can be written in different languages, including C++ and Java.

➢ **Introduction to Dot Net**
- What is .net
- Why .net
- Drawback with Earlier Technologies
- Advantages of .net

➢ **What is .net Architecture**
- Introduction to CLR
- CLR Architecture
- JIT compiler
- MSIL
- Understanding of IL with ILDASM

➢ **.Net Framework**
- Net framework
- Version of framework
- Common class library
- Common type system
- Common language specification
- Languages under .net

➢ **Introduction to OOP'S**
- Concept of Class & Objects
- Component inside class
- Data Types
- Type conversion

- Working with constructor
- Understanding of Inheritance
- Need of Inheritance
- Virtual and Abstract methods
- Details of polymorphism
- Method Overloading and overriding
- Working With collection(Array list, Hash table, stack , queue, etc)

➢ Understanding of INTERFACE & DELIGATE class
- What is Interface and Delegate class
- Implementation of **Iclass** and **Delegate**

➢ File Handling
- System.IO namespace
- Stream Reader &Stream Writer Class
- Reading and Writing with files

➢ Exception Handling
- Introduction
- Try..catch… Statements
- create custom exceptions
- Throw an exception using throw statement

➢ SQL Database
- Concept of DBMS
- Introduction of RDBMS
- Difference between DBMS &RDBMS
- Concept of creating DataBase & Table
- Working on Data Table with SQL Query

➢ Constraint
- Introduction to Constraint
- Types of constraints
- Implementation of Constraints

➢ SQL Joins
- Concept of JOIN statements
- INNER Joins
- OUTER Joins

- SELF Joins
- CROSS Joins

➢ **Stored Procedure**
- Concept of Stored procedure
- How to Create Stored procedure
- How to implement Stored Procedure

➢ **Creating &using Trigger**
- Introduction to Trigger
- Creation of trigger
- Dropping of trigger

➢ **SQL Function**
- Introduction to Function

➢ **Complex SQL Quires**
- Example of Complex quires

➢ **Working with VISUAL STUDIO(Web Application)**
- Introduction to web programming
- Client /server Technology over Internet
- How internet and Intranet works
- Client side script vs. Server side scripts
- Understanding the Importance of Web server
- creating and working with virtual directory in IIS
- Introduction to ASP.net Page life cycle

➢ **ASP.net Server Controls**
- Standard Controls
- Navigation Control
- Data controls
- Hyperlink, Image, Menu
- Validation Controls
- Group Validation Control

➢ **State Management in ASP.net(SMS)**

- Introduction to State management services
- Client side SMS
- Server Side SMS
- View, Hidden Field &Cookies
- Session & Application
- Type of session modes

➤ **Working with Master Page in ASP.net**
- Concept of Master Page
- Creation of master page
- Implementation of Master page in Application

➤ **Data Binding & Reporting in ASP.Net**
- Data Binding with Data controls
- Using Data binder Eval() method Crystal reporting

➤ **Caching**
- Introduction to Caching
- Usages of Caching
- Data Caching based on control or parameter
- Setting cache duration

➤ **Uploading & Downloading Files**
- Upload files using upload Controls
- Restricting the type and size of file
- Download the file on click Event

➤ **Mailing with Asp.Net**
- Mail Message & SMTP Class
- Providing Security while sending mails

➤ **Security in Asp.net Application**
- Introduction
- Security with session object using Form Authentication

➤ **Working with USER INTERFACE in ASP.net**
- CSS
- HTML Tags
- Javascript

- Jquery(Introduction only)